

only to implementing the new systems, but also to testing and, potentially, redesigning other features to avoid various forms of disfunctionality and non-interoperability. Multiple program blocking systems would unnecessarily drive up the cost of the program blocking technology and add a layer of complexity to the operation of the system by parents. Again, it runs directly counter to the overriding principle that simplicity in the design of the user interface and the operation of the system is crucial to widespread consumer acceptance and utilization of program blocking technology.

V. The Marketplace, Not the Government, Should Dictate User Interface Design for Program Blocking Technology.

After tentatively concluding that the program blocking technology adopted by the Commission should be implemented in "as 'user friendly' a manner as possible," and that such technology should not be easily disabled by children, the Commission asks whether it should request the Electronic Industries Association ("EIA") to provide manufacturers with "specific guidance...on how parents should be able to program their television receivers to block programs and steps that should be taken to ensure that children cannot override blocking instructions."^{16/} While it is fully anticipated that TV receiver manufacturers will provide clear and detailed instructions to parents regarding the operation of program blocking technology, Thomson urges

^{16/} NPRM at ¶ 14.

the Commission to leave the unique design of a receiver's user interfaces in the hands of manufacturers and the marketplace and to refrain from mandating user interface characteristics or features.

User interfaces include the front panel controls, on-screen menus and remote control devices used by a viewer to control the receiver's function. Manufacturers focus with laser-like intensity upon user interfaces because they understand that they are crucial to consumer acceptance of their product. User interfaces provide companies with the opportunity to innovate and develop new features capable of greatly enhancing performance or providing new functionality. For example, in the area of closed captioning, the absence of any mandated user interface standards enabled Thomson to develop a feature which permits the display of closed captions while the television receiver is set to a mute mode. Had user interface standards been mandated, this novel feature probably could not have been incorporated. Similarly, in a new area such as program blocking technology, the Commission should do everything possible to encourage creativity and innovation and should refrain from doing anything to stifle approaches which could make program blocking technology easier to use and more effective. Accordingly, it should not impose any user interface requirements.

The unique design and functionality of a television's user interfaces is specific not only to individual manufacturers, but also, in many cases, to individual models within a product line. As

such, they allow for broad differentiation and distinction among competing product lines and allow consumers to choose a set that meets his or her individual preferences and needs. Indeed, as new features are added to television receivers, one of the biggest challenges facing the manufacturer is how to provide the viewer with full use of those features without presenting him or her with a wildly confusing array of buttons, time-consuming steps or complicated instructions.

The Commission need not adopt standards for these functions because, put simply, it is already in the economic self-interest of manufacturers to make their user interfaces simple and easy-to-understand. Likewise, because a fundamentally important characteristic of any program blocking system will be its ability to withstand the curious, or at times devious, attempts by children to disable it, manufacturers will be self-motivated to build in adequate barriers to prevent such tampering in order to give parents the confidence they will demand that the programs they block will remain blocked.^{17/} This is merely a smart business decision: to do any less would be to invite the wrath of angry parents and customers who feel they have purchased equipment that does not work properly or adequately serve their needs. Moreover, the desire to make program blocking technology a marketable feature in its product line (similar to closed captioning) will

^{17/} Typically this feature involves a 4- or 5-digit PIN number that secures the system from being overridden.

incentivize manufacturers to ensure that the user interfaces are sufficiently child-proof, yet not adult-proof.

Moreover, the specification of user interfaces by the Commission could have extremely adverse unintended consequences beyond the narrow area of program blocking capability. It is a cardinal principle of television receiver design that all of the user interfaces must work well with each other. For example, the on-screen menus must be integrated seamlessly with the function of buttons on the remote control. Any attempt by the Commission to set user interface standards regarding even one aspect of operation almost inevitably will have ripple effects on the design and operation of other elements of the user interface, including functions having absolutely nothing to do with program blocking capability. This extremely important concern also militates against the Commission's mandating any user interface requirements.

Finally, the Commission lacks the legal authority to impose user interface standards, whether by "request" to the EIA or otherwise. Nowhere in Section 551 of the Telecommunications Act of 1996 does Congress authorize the Commission, either explicitly or implicitly, to impose upon manufacturers user interface standards for program blocking technology. Neither does the Commission in its NPRM claim to possess such authority. Indeed, if Congress had intended to give the Commission such authority, it would have done so explicitly, as it did when it instructed the Commission to adopt display standards for closed

captioning capability.^{18/} Thomson posits that the absence of such explicit authorization is intentional, revealing Congress' view that the Commission should *not mandate* user interface specifications for program blocking technology. Instead, Congress appropriately favored a market-based approach.

VI. Thomson Supports the Commission's Proposed Adoption of EIA-608 as the Standard for Transmission of Program Ratings Data.

The Commission proposes to adopt EIA-608^{19/} as the standard by which all NTSC television receivers with picture screens 13 inches or larger receive program ratings transmitted on VBI line 21, and seeks comment on whether other technical standards should be used instead of or in addition to that standard.^{20/} Thomson supports the use of EIA-608 as the most capable and reliable standard for transmission of program blocking data, with the clarification that it would incorporate recently adopted modifications to that standard.

On September 24, 1997, Committee R4 of EIA, which is responsible for the EIA-608 standard, balloted and approved EIA document 744 ("EIA-744"), "Transport of Content Advisory Information Using Extended Data Service (XDS)," as an EIA standard to specifically

^{18/} See 47 C.F.R. 330(b) (as enacted by Pub. L. No. 101-431 (1990)). In that instance, Congress expressly authorized the Commission to adopt "performance and display standards" for built-in decoder circuitry. Significantly, the Congress also did not confer upon the Commission the authority to impose user interface standards for closed captioning.

^{19/} "Recommended Practice for Line 21 Data Service."

^{20/} NPRM at ¶ 9.

address the line 21 XDS packet for transporting program ratings.^{21/} EIA-744 references and is to be implemented in conjunction with EIA-608, and will be incorporated into the next revision of that standard. The Commission should reference EIA-744 in its final rules.

VII. The Commission Should Amend Its Rules to Ensure the Integrity of Ratings Information by Various Video Programming Distributors.

The Commission proposes to clarify its rules to require both cable television systems and television broadcast stations not to delete or modify program ratings information carried on line 21 of the VBI.^{22/} Thomson supports the Commission's proposal as a reasonable and necessary step to guarantee the transmission and integrity of program rating information from the encoded site to the consumer's final receiving apparatus.

As the Commission correctly notes in the NPRM,^{23/} such a requirement would appropriately harmonize the Commission's program blocking rules with its current rules protecting closed captioning data carried by cable television systems and terrestrial broadcasting

^{21/} Extended Data Service is a broadcaster-generated, viewer-controlled information service that enables broadcasters to provide programming information that viewers can access whenever they need it. Consumer Electronics Manufacturers Association
<<http://www.cemacity.org/gazette/files/vchip.htm>>

^{22/} NPRM at ¶ 20.

^{23/} Id.

stations from being removed or altered.^{24/} Because closed captioning and program blocking data both are carried on line 21 of the VBI, such harmonization is immensely logical and would not impose an undue burden on video programming distributors.

VIII. Other Television Receiving Apparatus.

Thomson opposes any requirement that stand-alone receivers (such as DTV receiver boards, VCRs, cable decoder boxes, and DBS, MMDS and DTV converter boxes) or video display devices (including personal computer monitors) be equipped with program blocking capability. Such a requirement would impose an undue financial burden on manufacturers and, particularly in the case of DTV converter boxes, increase the cost to consumers. Instead, the Commission, at a maximum, should only require that stand-alone receivers *not delete or modify* the rating information, letting the television handle the user interface and blocking capabilities.

IX. Thomson's Recommendations for An Extended Implementation Deadline for Program Blocking and the Adoption of a Single Constant Ratings System Apply Equally to DTV Receivers.

In implementing its program blocking rules, the Commission should strive for maximum harmonization between its requirements for standard analog television receivers and those for DTV receivers. Such harmonization will minimize parental confusion, maximize the acceptance

^{24/} See 47 C.F.R. § 76.606. See also *Report and Order* in MM Docket 95-176, adopted August 7, 1997.

and use of V-chip program blocking technology by parents, and bolster consumer confidence and participation in the transition to digital television.

A. Manufacturers Cannot Begin to Design Program Blocking Capability for DTV Receivers Before the Commission Adopts the Industry Ratings System and its Technical Rules.

The Commission proposes to require DTV receivers with picture screens of 13 inches or larger to include program blocking capability within 180 days of the Commission's adoption of its rules and seeks comment on the "practicality" of such a deadline.^{25/} For many of the reasons that Thomson urges the Commission to extend its deadline for program blocking capability for analog receivers, Thomson similarly urges the Commission to delay its effective date for initial DTV receiver compliance to July 1, 1999, with the balance of DTV product models to be equipped with V-chip technology by July 1, 2000. As is the case with NTSC receivers, this schedule presupposes that the Commission will complete this rulemaking and deem the TV ratings system acceptable by January 1998.

As currently proposed, the Commission's deadline for DTV receivers to be made available with program blocking capability simply is impossible for manufacturers to meet. The product development cycle for DTV receivers is no shorter than that for analog receivers, *i.e.*, 18 to 24 months. Indeed, since DTV is a new product, the anticipated cycle is toward the long end of that

^{25/} NPRM at ¶ 19.

range to accommodate the introduction of fundamental changes in design and technology. There is nothing inherent in digital technology which permits introduction of program blocking capability into DTV receivers in a manner which bypasses the normal product development cycle discussed in detail above. As with analog receivers, manufacturers can only initiate a product development cycle for program blocking capability in DTV receivers after the Commission has approved the ratings system and the technical standards. Neither has yet occurred. In fact, the Commission acknowledges that standards for implementing the program blocking requirements in DTV receivers have not been adopted yet by ATSC, much less the Commission.^{26/}

Since the product development cycle is irreversibly under way for Thomson's first generation of DTV receivers, which it will introduce in time for the Christmas shopping season in 1998, it is extremely improbable that V-chip program blocking technology will be incorporated into that initial DTV product line. If, assuming the readiness of ATSC's technical standards, the Commission adopts the program ratings system and final rules implementing the DTV program blocking requirements in January 1998, Thomson anticipates being able to offer program blocking in DTV sets that arrive in stores after July 1999. Finally, Thomson notes reluctantly that if the Commission does not conclude its rulemakings prior to January 1998, the design cycle for this

^{26/} NPRM at ¶ 18. The program ratings standard for DTV should be based on ATSC T3/S8 Document 193, "Program System Information Protocol for Terrestrial Broadcasting and Cable," currently being balloted by ATSC.

second generation of sets will have been missed, and Thomson likely would be forced to delay offering program blocking in DTV receivers until July 2000.

The risks of artificially compressing the product development cycle for program blocking capability in DTV receivers are even greater than for NTSC receivers. Not only is there unacceptable technical risk to the effective and user-friendly operation of the V-chip, but there also is unacceptable risk to the launch of DTV if the program blocking feature does not work properly or causes other "spillover" problems in the DTV receiver. Consumers taking the financial risk of purchasing a first generation DTV receiver will expect that expensive, new receiver to function far better than their "low-tech" analog set. If, however, manufacturers are required to so contort their production cycle that it results in technical problems or substandard operation of any type, it may irrevocably "spook" the market and cool the consumer demand which is critical to driving the DTV transition. Instead, to protect the integrity of the DTV roll-out and to encourage rather than *discourage* early purchases of DTV receivers, the Commission should give manufacturers the time required to ensure that the program blocking function of these sets works as it should.

B. DTV Receivers Should Not Be Required to Accommodate Future Ratings Systems.

Just as an analog television's program blocking circuitry cannot be "retrofitted" to accommodate future ratings systems, Thomson does not contemplate that program blocking technology in the early generations of DTV receivers will be able to be "reprogrammed" to decode and display future ratings systems. Although the ATSC standard likely to govern program ratings systems in a digital environment provides for the capability to download program ratings,^{27/} it does so through a very complex methodology which involves 256 categories. In order to utilize this downloading capability, however, there has to be a means to display such downloaded ratings in a way which would be intelligible to viewers. In short, there also would have to be a concurrent capability to download compatible changes to user interfaces. Such a capability does not yet exist, and it is not prudent to predict how quickly it can or will be developed. Moreover, the cost/performance tradeoffs will have to be analyzed very carefully before any such capability were to be incorporated into a commercial product. It is quite likely that significant additional computing power would be required to achieve this capability which, in

^{27/} This capability (i.e., "downloading" a different rating system and the data required to display it) is different from the receiver's ability to "download" ratings information associated with a particular program.

turn, could drive up costs substantially. Accordingly, Thomson suggests that it is simply premature to require DTV receivers to accommodate future ratings systems at this time.

C. NTSC and DTV Television Receivers Should Use the Same Ratings System.

Finally, as a practical matter, it is very important that the ratings system adopted for use by standard analog television receivers also be the system required for use by DTV receivers. As the DTV transition gets under way, many consumers will reach a point, at least on an interim basis, where at least one analog and one digital television (or another analog television with a digital converter box) are being used on a regular basis. It is essential that each of these receivers operates identically with the other vis-a-vis program blocking, lest parents be faced with the unacceptable burden of having to educate themselves on and navigate among two different ratings systems, depending on which television they are using. Such a requirement, given the extraordinary and unnecessary degree of user confusion it would spawn, would jeopardize not only parents' acceptance and use of the V-chip, but also, potentially, consumer confidence in DTV.

Moreover, there is absolutely no programming-based need for DTV receivers to accommodate different or additional ratings systems than NTSC receivers. In the transition to digital, it is contemplated that most broadcasters will be simulcasting a substantial amount if not all of their programming on both their analog and digital channels. Since the programming will be

substantially the same for the foreseeable future, it makes no sense to have different ratings systems for NTSC and DTV service. Indeed, such a regime would serve only to confuse parents and increase the likelihood of consumer rejection of both the V-chip and DTV.

X. Conclusion

Once again, Thomson fully shares the Commission's goals of moving V-chip technology off the drawing boards and into the hands of parents as quickly as possible, and ensuring that parents find the program blocking feature to be as easy to use as possible. With these goals in mind, and for the reasons stated above, Thomson urges the Commission to approve the industry ratings system and the instant program blocking technical rules for manufacturers no later than January 1998, and move back its proposed implementation date by one year, requiring at least half of all product models to be in compliance by July 1, 1999, with the remaining models due in compliance by July 1, 2000. The Commission should not require manufacturers to design their receivers to accommodate multiple ratings systems or unknown future ratings systems. The

Commission should not regulate in any way television user interfaces. Finally, the Commission should not levy different requirements upon analog and DTV receivers.

Respectfully submitted,

THOMSON CONSUMER ELECTRONICS, INC.

David H. Arland
Manager, Public Affairs
Thomson Consumer Electronics, Inc.
P. O. Box 1976, INH-110
Indianapolis, IN 46206-1976

By: Lawrence R. Sidman
Lawrence R. Sidman, Esq.
Sara W. Morris
Verner, Liipfert, Bernhard,
McPherson & Hand, Chartered
901 15th Street, N.W., Suite 700
Washington, D.C. 20005
(202) 371-6206

Counsel for Thomson Consumer Electronics, Inc.

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